BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Name of the work: **Modified Estimate for Improvements to Balance Roads and Drains in ward No. 10 Vidyaranyapura Sub Division.**

							Estimate Cost:		3306497.00
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 141 / Item No. 19.1 / PWD SR 2015-16**	Cum							
	Desilting								
	Vemanna Layout Main Road		2	180.00	0.45	0.35	56.70		
	Cross Road		2	65.00	0.45	0.40	23.40		
	For Road Work main Road		2	135.00	0.60	0.40	64.80		
			1	145.00	0.90	0.40	52.20		
			1	10.00	6.00	0.20	12.00		
			1	35.00	6.00	0.20	42.00		
	Cross Road		1	65.00	5.20	0.20	67.60		
	CC Drain		2	65.00	0.80	0.75	78.00		
	Gas Godan Road		2	145.00	0.80	0.75	174.00		
			1	25.00	1.00	1.00	25.00		
	Culvert		1	7.00	2.00	1.20	16.80	TP	
							612.50	71.00	**43488.00**
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of **mix 1:4:8 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. **No. 12/ Item No. 4.3/ PWD SR 2015-16**	Cum							
	CC Drain Cross Road		2	65.00	0.80	0.15	15.60		
	Gas Godan Road		2	145.00	0.80	0.15	34.80		
	Main Road		1	25.00	1.00	0.15	3.75		
	Culvert		1	7.00	2.00	0.15	2.10	TP	
							56.25	4400.00	**247500.00**
3	KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in **superstructure with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 **Page No. 23 / Item No. 5.12 / PWD SR 2015-16**	Cum							
	Culvert		2	7.00	0.60	0.90	7.56		
							7.56	4500.00	**34020.00**

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
4	KSRB 15.1.2: Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. **Page No. 113 / Item No. 15.2 / PWD SR 2016-17**	Sqm							
			2	7.00		0.90	12.60	TP	
							12.60	85.00	**1071.00**
5	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix 1:2:4 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.53 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6 / PWD SR 2016-17**	Cum							
	Pointing		1	7.00	1.80	0.10	1.26		
	Ramp		2	7.00	1.00	0.15	2.10	TP	
							3.36	5000.00	**16800.00**
6	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface such as walls** at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 **Page No. 15 / Item No. 4.31 / PWD SR 2015-16**	Sqm							
	RCC Drain Side Wall		2x4	65.00		0.45	234.00		
			2x4	145.00		0.45	522.00		
			4	25.00		0.60	60.00	TP	
							816.00	285.00	**232560.00**
7	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal**, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, **Page No. 13 / Item No. 4.11 / PWD SR 2015-16**	Cum							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	For CC Drain bottom		2	65.00	0.75	0.15	14.63		
	s Godna Road		2	145.00	0.75	0.15	32.63		
			1	25.00	0.90	0.15	3.38		
	side wall		4	65.00	0.15	0.45	17.55		
			4	145.00	0.15	0.45	39.15		
			2	25.00	0.15	0.60	4.50	TP	
							111.83	5785.00	**646908.00**
8	KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **- TMT bars Fe 500 Page No. 17 / Item No. 4.46.2, PWD SR 2016-17**	Tonne							
				111.83	0.060	T/cum	**6.71**	TP	
							6.71	77500.00	**519986.00**
9	Providing **precast slab of 100mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge- Data rate	Sqm							
	Cross Road		2	65.00	0.75		97.50		
			2	145.00	0.75		217.50		
	Main Road		1	25.00	0.90		22.50	TP	
							337.50	1400.00	**472500.00**
10	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km etc complete as per specifications and directions of engineer in charge of the work	Cum							
				Qty Vide Item No.			**612.50**	TP	
							612.50	68.01	**41656.00**
	EIRL								
10	Providing **precast slab of 250mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - Data rate	Sqm							
			1	7.00	1.80		12.60		
	Basic Rate	5125.00					**12.60**	5125.00	**64575.00**

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
11	KSRRB M400-6.1. Construction of granular sub-base by providing close graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. - For Grading II Material **Page No. 154, Item No. 20.4.2 PWD SR 2016-17**	Cum							
	Road Sides								
	Vemanna Layout Main Raod		2	135.00	0.60	0.20	32.40		
	UGD Cutting Portion		1	135.00	0.90	0.20	24.30		
							56.70	1589.99	**90152.00**
	Basic Rate	1571.00							
	Area Weightage @ 6%	94.26							
	Total	**1665.26**							
	Tender Premium @ -4.52%	**-75.27**							
		1589.99							
12	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **Page No. 158 / Item No. 20.18, PWD SR 2016-17**	Cum							
	Road Sides								
	Vemanna Layout Main Raod		2	135.00	0.60	0.20	32.40		
	UGD Cutting Portion		1	135.00	0.90	0.20	24.30		
			1	10.00	6.00	0.23	13.80		
			1	35.00	6.00	0.23	48.30		
	Cross Road		1	65.00	5.20	0.23	77.74		
							196.54	1688.16	**331792.00**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
	Tender Premium @ -4.52%	**-79.92**							
		1688.16							
13	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 **Page No. 161 / Item No. 21.6, PWD SR 2016-17**	Sqm							
	Vemanna Layout Main Raod		2	135.00	0.60		162.00		
	UGD Cutting Portion		1	135.00	0.90		121.50		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
			1	10.00	6.00		60.00		
			1	35.00	6.00		210.00		
	Cross Road		1	65.00	5.20		338.00		
							891.50	26.31	**23459.00**
	asper Revised Basic Rate	26.00							
	Area Weightage @ 6%	1.56							
	Total	**27.56**							
	Tender Premium @ -4.52%	**-1.25**							
		26.31							
14	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **Page No. 161 / Item No. 21.6, PWD SR 2016-17**	Sqm							
	Vemanna Layout Main Raod		1	180.00	6.00		1080.00		
							1080.00	3.04	**3279.00**
	Basic Rate	3.00							
	Area Weightage @ 6%	0.18							
	Total	**3.18**							
	Tender Premium @ -4.52%	**-0.14**							
		3.04							
15	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **Page No. 161 / Item No. 21.7 PWD SR 2016-17**	Sqm							
			Qty Vide Item No.				1080.00		
			1	35.00	6.00		210.00		
							1290.00	11.13	**14362.00**
	asper Revised Basic Rate	11.00							
	Area Weightage @ 6%	0.66							
	Total	**11.66**							
	Tender Premium @ -4.52%	**-0.53**							
		11.13							
16	KSRRB 500-11. Providing and laying **bituminous macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixd material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. MORTH /Chapter 5 - **using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 3.3 % VG-30 Bitumen Page No. 162 / Item No. 21.11.6, PWD SR 2016-17**	cum							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Main Road		1	35.00	6.00	0.05	10.50		
	LGD Cutting Portion		1	145.00	0.90	0.05	6.53		
	Road Sides		2	145.00	0.60	0.05	8.70		
							25.73	5000.73	**128644.00**
	Basic Rate	4941.00							
	Area Weightage @ 6%	296.46							
	Total	**5237.46**							
	Tender Premium @ -4.52%	**-236.73**							
		5000.73							
17	KSRRB M500-19. Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - **using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen Page No. 165 / Item No. 21.22.6, PWD SR 2016-17**	Cum							
	Vemanna Layout Main Road		1	180.00	6.00	0.040	43.20		
	Cross Road		1	65.00	5.20	0.040	13.52		
							56.72	6941.91	**393745.00**
	Revised Basic Rate	6859.00							
	Area Weightage @ 6%	411.54							
	Total	**7270.54**							
	Tender Premium @ -4.52%	**-328.63**							
		6941.91							
	Sub Total								**3306497.00**
	Rupees Thirty Three Lakh(s) Six Thousand Four Hundred Ninety Seven Only								

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.

2 This estimate is prepared as per Tender Premium and PWD SR of 2016-17 +/- Tender Premium.

3 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidayranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Modified Estimate - Sanctioned

03/5/17